

AN EXAMINATION OF LEGISLATION FOR THE
PROTECTION OF THE WETLANDS OF THE ATLANTIC
AND GULF COAST STATES

by

ANTHONY J. HAUEISEN, J.D.
School of Law
The University of Mississippi
Oxford, Mississippi

INTRODUCTION

The most useful aquatic areas in the world are in serious danger of destruction. The estuaries, where fresh water, land and sea meet in a dynamic and highly productive zone, are today gravely threatened through unwise and unplanned excessive use of their valuable but finite capacities. Estuaries include the coastal zone which is affected by both the run-off of fresh water from the land and the salt water from the sea. This zone includes tidal rivers, marshes, bays and river mouths. The value of these estuarine regions has been well established by biologists. However, this value is fully appreciated by only a handful of people. The intense uses to which the coastal zone is being placed are so expansive, so competitive and potentially so destructive. Much shipping for industrial and military purposes begins and ends in estuaries. The waste products of the industries which crowd the coastal zone and of one-third of the population of this country are daily being poured into these waters. Estuaries are directly linked to suitable conditions needed for the development of three-fourths of the fish and shellfish taken for food production and recreational fishing. In addition, the use of these so important coastal regions is ever increasing by our growing population for aesthetic and recreational purposes.

Each of the above uses is an important human use. However, each of these uses is potentially destructive. Even aesthetic uses, which have heretofore been above reproach, can irretrievably destroy this fragile ecosystem when vast areas are developed for housing projects by dredging and filling in the land. In fact, this action may destroy the very reason why people wish to move to the shore. All of these uses, and others, have developed without sufficient comprehension of their effects and interactions and totally without planning for an optimal balance for present and future human uses. Present and potential human uses involve vast and complicated economic problems, political and geographic difficulties, and grave social and legal complications. It is with the latter, the legal problems of wetlands preservation and utilization, that this paper is concerned.

It is proper that I should here acknowledge the work of Mr. Lionel Eleuterius of the Gulf Coast Research Laboratory who first

visualized the need for a collection and examination of the laws of the various coastal states in regard to the preservation of their wetlands and who personally assembled the raw materials out of which this paper is formed. Furthermore, I should acknowledge Dr. Thomas Lytle, also of the Gulf Coast Research Laboratory, who recommended this project to me and guided my research.

This paper will be divided into several distinct sections. It is initially important that we define just what we are examining; therefore, the first part of this paper will describe what wetlands are and attempt to explain something of the ecology of this region. The next part of the paper will examine the laws of the coastal states to determine what, if anything, they have done to preserve and utilize their wetlands. The last part of the paper will examine what states may do to protect their wetlands, contain a legislative model for a wetlands act, and discuss possible implementation of this proposed legislation.

WHAT ARE WETLANDS?

Wetlands is a general term used to describe the water-land interface, whether ocean and shore or river and bank. However, in this paper we will be more concerned with the ocean-shore interface because of the extreme richness of this particular area and its vulnerability. Wetlands may occur as a dividing fringe along shorelines interposed between permanent dry land and open surface water expanses of rivers, estuaries, etc. They may also exist in another configuration; as rather extensive tracts continuing for hundreds of miles and acres in area.

There are numerous local names by which wetlands are known. Some of these are salt marsh, tidal marsh, marshland, tideland, submerged land, swamp, slough, bog, mud flats, wet meadow, or flood plain. People tend sometimes to use these terms interchangeably, although ecologists differentiate between many of these terms. The following classification system is derived from an extensive analysis of wetlands in Maryland.¹ The classification system briefly describes each type of wetland and outlines very generally the more important physical and ecological characteristics distinguishing each. In examining wetlands, we are concerned with two major distinct groupings: 1.) those wetlands which occur in inland, freshwater areas, and 2.) those which occur in coastal areas and are our especial area of interest.

I. Inland, freshwater wetlands.

In this category of freshwater, non-tidal wetlands there are seven types of wetlands included. They are:

¹ Maryland State Planning Department, *Draft Report—Wetlands In Maryland*, January, 1970, p. V3.

1. Seasonally flooded basins and flats
2. Inland fresh meadows
3. Inland shallow fresh marsh
4. Inland open fresh water—ponds, lakes, etc.
5. Shrub swamp—found along sluggish streams.
6. Wooded swamp—often occurs on poorly drained uplands.
7. Bogs—usually waterlogged and having a spongy covering of mosses.

II. *Coastal Wetlands*

This category can be further subdivided into two distinct areas. These are fresh and saline marshes, which are distinguished by differences in shoreline elevation and the consequent varied influence of the tide. This tidal activity partially accounts for the high productivity of the coastal wetland as will be described later. There are seven types of coastal wetland, three of which are in freshwater areas and four of which are in saline areas.² They are:

A. Fresh Areas

1. Coastal shallow fresh marsh—average mean high tide may cover this area with up to 6 inches of water.
2. Coastal deep fresh marsh—average mean high tide may cover this area with from 6 inches to 3 feet of water.³
3. Coastal open fresh marsh—these are usually more or less enclosed tidal ponds, and vegetation is usually scarce or lacking because of the turbidity of the water due to the tidal cycles and currents which keep sediment and detritus in suspension.

B. Saline Areas

1. Coastal salt meadow—this soil is always waterlogged; but because of its elevation, it is rarely covered by tidal waters.
2. Irregularly flooded salt marsh—the soil in this area is covered by a few inches of water at irregular intervals.
3. Regularly flooded salt marshes—the soil is covered at mean high tide by one-half foot or more of water. This is the area with which we are specifically interested. This area is important as nesting areas for gulls and rails, as feeding areas for herons, as habitat for mussels, snails, and crabs and is used by fish and crustaceans.
4. Sounds and bays—this type consists of submerged land under the open waters of sounds or bays. Vegetation is

² *Ibid.*, p. V-7.

³ The difference in depth of saltwater inundation determines the types of vegetation and animal life found in these areas.

usually scarce. However, this area is important because it is the habitat of fishes, oysters, mussels, shrimp, clams, crabs, and many other invertebrates upon which these species feed.

This necessarily brief description of the terms used in defining wetlands will serve to illustrate just how minute and complex terminologies can become when dealing with any involved and intricate natural system.

BASIC WETLANDS ECOLOGY

The term ecology has very recently come into vogue. However, the language and techniques of ecology and ecological research are largely unknown to the public. Ecology may be defined as the study of the interrelationships of organisms to one another and to their environment. It is possible to divide a study of an ecological system into two distinct parts: 1.) the structure of the ecosystem itself, including quantity and distribution of plants and animals and the physical characteristics such as temperature, light, pH, salinity, dissolved oxygen, etc.; and 2.) the function of the ecosystem, including the rate and amount of biomass production⁴ and the cycling of nutrients within the biotic community. Without a knowledge of these ecological principles and other information, it would be impossible for well-intentioned individuals to formulate sound natural resources management policies. Therefore, I will briefly describe some general principles of ecology and some concepts concerning the marsh ecosystem.

Since tidal marshes are ecological formations resulting from the invasion of shallow water by land vegetation, it would perhaps be best to examine those areas best suited to this invasion. The most obvious place for land vegetation to invade the shallow sea is along the edges of the vast coastal plain which makes up a part of the continental shelf. This coastal plain extends along most of the Eastern and Gulf coasts of the United States but is largely lacking along the Pacific Coast. In early geological history, the present continental shelf was, for the most part, also the coastal plain. Today, the continental land mass is less expansive and much of the former coastal zone is submerged. Some submergence is still occurring, at a rate of about one foot per century; but the coastal area is just about holding its own due to the seaward transport and deposition by rivers of sediments from inland. However, the levee-building activity of the Army Corps of Engineers is diverting this sediment from the coastal zone and actually forcing it out to the edge of the continental shelf where it is lost for human use for all practical purposes. In some coastal areas,

⁴ Biomass may be defined as the total quantity at a given time of living organisms of one or more species per unit of space (species biomass), or of all the species in a community (community biomass).

marshes. Among marine species only a relatively few can adjust to the rapid salinity changes which occur with each tide. Those few species that can endure the tidal marsh conditions, however, are relatively free of the kinds of competitors and enemies that harass related species in nearby waters.

As in other ecosystems, the same general relationships and components exist in a tidal marsh. Plants utilize sunlight energy in their growth and reproduction and are the primary producer component of the ecosystem. They are a source of food for grazing animals. These animals in turn furnish food for carnivores. Bacteria and fungi comprise the component which reduces or decomposes the dead organisms to inorganic levels, returning such nutrients as phosphates and nitrates to the marsh system where they are re-used by the plants in the manufacture of more plant tissue. In conjunction with the re-use of the nutrients and the one-way flow and ultimate release of the energy first stored by the plant life, it is necessary to add to this simple structure other natural trends and cycles which affect the marsh ecosystem. The tides redistribute nutrients and sediments throughout the tidal marsh. They also affect the overall primary productivity by decreasing or increasing exposure of the microscopic algae and marsh plants or the quantity of phytoplankton that is favorably exposed to sunlight as the volume of water over the marsh changes.

It has been claimed that "tidal marshes and estuaries . . . are among the most fertile areas in the world in terms of energy, calories, proteins, carbohydrates and vitamins."⁵ Ecological studies have shown that "gross income from the best market farms . . . runs as high as \$2,000 per acre per year. On a comparative basis, the major marshlands are producing \$4,000 worth of nutrients per acre per year."⁶ Fertility of estuaries also results from year-round primary production. Wetlands ecosystems tend to maintain a constant rate of production during seasonal environments. For example, marsh grass produces at least two crops per year as compared with wheat which grows only a few months with zero growth for many months. The annual production of a marsh, or an estuary as a whole, may be double or triple that of ordinary agricultural land simply because it produces two or three times as long each year.

Now that we have very briefly examined some basics of marsh ecology and its importance, it is time to turn to the next major area of this paper, an examination of the various coastal states with regard to those laws which have been enacted to protect their wetlands.

⁵ Robert L. Dow, *Maine's Coastal Marshlands: Their Values, Present and Future* (Augusta: Maine Department of Sea and Shore Fisheries, 1962), p. 3.

⁶ Robert L. Dow, *Economic Yields of Some Maine Coastal Wetlands* (Augusta: Maine Department of Sea and Shore Fisheries, 1966), p. 1.

LEGAL APPROACHES TO THE PROTECTION OF WETLANDS

In this chapter, I shall examine statutes from the states on the Atlantic Coast and on the Gulf Coast of the United States and shall emphasize those which act to protect wetlands. First, I will examine the Federal laws relative to this area; and then, I will examine the laws of the states in geographical order from Maine to Texas.

A. FEDERAL LEGISLATION

The English Common Law has come into all of the United States, with the exception of Louisiana, and has evolved through case interpretation by the Supreme Courts of these various cases. The essential common law principle is that title to soil under navigable waters is in the sovereign except as far as private rights have been acquired in an expressed grant from the original sovereign. During the time of the original thirteen colonies, the tidelands and the submerged lands were under the complete control of the Crown and they were held by the Crown in trust for the people as a whole. The riparian owner has ownership ordinarily only to the mean high water mark.

After the Revolutionary War, the American states succeeded the Crown as Sovereign. The States continued to hold the tidelands and submerged lands in a sovereign capacity in trust for the people subject to the public purposes of navigation, commerce, fishing, boating, recreation and enjoyment free from obstruction and interference.

State ownership, and in some cases private ownership, of tidelands and submerged lands are subject to the paramount right of control by the Federal Government under the U.S. Constitution for commerce and navigation. As stated, all real property was originally in the Sovereign. It was then granted in one way or another to private individuals. There are three types of grants from the Sovereign: 1.) the first, was by the Lords Proprietors; 2.) by the Crown itself up until the time of the Revolutionary War; and 3.) from the Revolutionary War to the present in the form of State Grants.

The States of the Atlantic and the Gulf Coast have absolute title to submerged lands. The state has *prima facie* title (i.e. it goes into the court with a presumption of title) to the tidelands, i.e., the area between the mean high water mark and the mean low water mark. A claimant to private ownership of tidelands must come into court with a chain of title, tracing his title back to the original grant from the Sovereign. This is sometimes difficult to do due to the destruction of the intervening records. A claimant must produce an original grant which is then presented to the court as a question of law as a construction of that grant.

The Federal Government has jurisdiction over these tidelands, submerged lands and navigable waters under the Navigation and

Commerce Clauses of the Federal Constitution. There is joint or concurrent jurisdiction between the Federal Government and the Government of the particular State over the navigable waters of the United States which are also navigable waters of that particular State. The navigable waters of a State include all of the navigable waters of that State, whereas, the Federal Government only has jurisdiction over a certain percentage of those waters which have been classified, either by the Federal Congress or by some rule and regulation, as being Federal navigable waters. These waters are usually waters that are in continuous connection between different states or between the state and the open ocean.

The other State waters are under the complete jurisdiction of that particular State. The law, as far as the Federal Government is concerned, was relatively stable up until 1947 when after a period of time the U.S. Department of Interior through the U.S. Attorney General's Office began litigation first against the State of California and later involving decisions in 1950 against the States of Texas and Louisiana attempting to take over actual Federal ownership of all tidelands and submerged lands. The decisions of the U.S. Supreme Court in effect completely reversed all prior law and stated that the Federal Government was the absolute owner of these areas. The Congress passed the Submerged Lands Act of 1953 whereby the Federal Government, in effect, abandoned the title to the area lying below the mean high water line and left the actual ownership in the hands of the State as determined by the State law. At the present time, the only interest the Federal Government has in these areas is this easement or servitude on the part of the Federal Government for the control of commerce and navigation which goes up to the mean high water mark. Congress also has an interest, of course, in any of these areas which affect National Defense, international affairs, flood control and electric power production.

Some of these Federal Agencies with various powers of regulation are the Federal Power Commission, U.S. Navy, U.S. Army Corps of Engineers (which has essential control over interstate navigation and the intracoastal waterway), and the U.S. Coast Guard with the enforcement of revenue laws and boating laws.

In 1953, the Federal Government also passed the Outer Continental Shelf Lands Act which stated that the Federal Government had absolute jurisdiction between the outer limits of the state boundary, which is usually taken to be three miles, but in the case of Texas and Florida extends out to three marine leagues (which is ten and a half miles) outside of the state's mainland area. The Federal Government is supreme between the state boundary and the extent of the Continental Shelf, extending out in some areas 120 to 150 miles.

The State jurisdiction over the tidelands, submerged lands, and navigable waters are co-extensive with the Federal Government in-

volving both the state navigable waters and the Federal navigable waters. The State has exclusive jurisdiction over the state navigable waters. Within each State there are a number of agencies and departments that have overlapping jurisdiction, regulation and control of the tidelands and submerged lands.

The focus of the Federal Government with regard to the protection of the wetlands has been directed in two major areas: pollution control and preservation of migratory bird nesting and feeding areas. Both of these approaches may be helpful in protecting marshlands. First, let us examine the role of the Federal Government in pollution control.

The Federal Government entered into the area of water pollution control in 1899 with the enactment of the Rivers and Harbors Act.⁷ This statute made it a criminal offense to deposit any refuse matter of any kind or description into any navigable water of the United States. In 1966, the U.S. Supreme Court held that "refuse" was not limited to materials of no value but included any substance, whether or not usable by industrial standards, which has a deleterious effect on navigable waters.⁸

The Oil Pollution Act of 1924 was an enactment to deal with the problem of oil discharges from vessels into coastal waters damaging aquatic life, harbors and dock and recreational facilities.⁹ The prohibitions in this Act proved to be quite difficult to police as a practical matter.

The Water Pollution Control Act of 1948 was also the really first modern identifiable Federal program for water pollution control.¹⁰ It stated that the pollution of interstate waters which endangered the health or welfare of persons of another state is to be considered a public nuisance subject to abatement and that the States were recognized to have primary responsibility and the right to control water pollution while the Federal Government had jurisdiction over the nation's interstate waterways and their tributaries.¹¹ The Surgeon General was directed to coordinate and encourage cooperation among all levels of government involved in pollution control and to engage in joint activities with State and interstate agencies.¹² The Act also encouraged the adoption of uniform State laws and the creation of interstate pollution control compacts.¹³ The Surgeon General was authorized to prepare and adopt comprehensive programs to eliminate

⁷ Rivers and Harbors Act of 1899, 33 U.S.C. §§401-413 (1899).

⁸ *United States v. Standard Oil Co.*, 384 U.S. 223 (1966).

⁹ Oil Pollution Act, 33 U.S.C. §§431-437 (1924).

¹⁰ Water Pollution Control Act, 62 Stat. 1155, 33 U.S.C. §§466 (1948).

¹¹ *Ibid.*

¹² *Ibid.*, at §466(b) (1952).

¹³ *Ibid.*, at §466(c) (1964).

pollution in waterways and support and aid technical research to devise and perfect methods of treatment of industrial wastes.¹⁴

In 1956, amendments to the original 1948 Act were passed which provided for a much more intensive and well-organized Federal pollution abatement program than did the earlier law.¹⁵ They emphasized the basic policy that water pollution problems were best solved at the local level. Grants to States and to interstate agencies were authorized for administration of water pollution control programs including comprehensive river basin programs involving control, research, and enforcement. It provided for technical assistance, the encouragement of interstate compacts and uniform State laws, the appointment of a Federal Water Quality Advisory Board, and a cooperative program for the control of pollution from Federal installations.

In 1961, the Federal Water Pollution Control Act Amendments were enacted.¹⁶ These amendments extended Federal pollution abatement authority to all interstate or navigable waters, increased construction grants and authorized research facilities in various parts of the country and the conducting of water quality studies in the Great Lakes. It should also be noted that the amendments transferred the administrative responsibilities for the program from the Surgeon General to the Secretary of Health, Education and Welfare.¹⁷

In 1965, the Federal Water Quality Act was signed into law.¹⁸ Briefly, this Act provided for the adoption and enforcement of water quality standards for interstate waters and set up the Federal Water Pollution Control Administration in the Department of Health, Education and Welfare. It increased construction grants and authorized research and development grants for preventing discharge of untreated wastes from storm sewers or combination storm-sanitary sewers.

In 1966, the Federal Clean Water Restoration Act became law.¹⁹ This Act provided incentives to the States to adopt water quality standards for pollution control and provided for Federal reimbursement for qualified construction projects commenced at a time when Federal grant funds were not sufficient to pay the full Federal share. The purpose of this provision was to encourage a State prepared to move ahead with sewage treatment plant projects to start building without waiting for a Federal grant. Under this program, if the project is Federally approved, the local governments may advance the Federal share of the project themselves and be reimbursed with funds as they become available. It authorized the use of Federal enforce-

¹⁴ *Ibid.*

¹⁵ Water Pollution Control Act Amendments of 1956, 70 Stat. 499, 33 U.S.C. §466-466(k) (1964).

¹⁶ *Ibid.*

¹⁷ *Ibid.*

¹⁸ Water Quality Act of 1965, 79 Stat. 903 (1965).

¹⁹ Clean Water Restoration Act of 1966, 80 Stat. 1246 (1966).

ment equipment with relation to international boundary waters and transferred responsibility for administration of the Oil Pollution Act to the Secretary of Interior and changed that Act to include inland waters.

In 1970, the Water Quality Improvement Act was enacted.²⁰ This Act forbade oil discharges into navigable waters, adjoining shorelines and the waters of the contiguous zone and requires a National Contingency Plan for removal of any spills. This Act provides that the owner of a polluting facility can be fined up to eight million dollars for the clean-up costs or more if there is willful negligence or willful misconduct.

The second focus of Federal programs is concerned with migratory wildfowl. The Migratory Bird Treaty Act of 1918 assigned to the Federal Government primary jurisdiction over the protection of migratory birds, including wildfowl. This was followed in 1929 by the Migratory Bird Conservation Act which provided the authority and funds for the establishment of Migratory Bird Refuges. The first waterfowl hunting stamp (at a cost of \$1) was required by the Migratory Bird Hunting Stamp Act of 1934. This Act helped finance the refuge program.

The Federal Aid in Wildlife Restoration Act (Pittman-Robertson) of 1937 made it possible for many states to initiate programs of wetlands acquisition and development. In 1949, an amendment to the Hunting Stamp Act raised the price of the "duck stamp" to \$2; another in 1958 further increased it to \$3. The latter amendment also specified that duck stamp funds be used exclusively for the purchase of waterfowl production areas and suitable areas for migratory bird refuges; also that as much as 40% of a refuge may be opened to hunting of migratory birds.

In spite of these efforts, loss of wetlands continues at an alarming rate. In recognition of the growing problem, Congress in 1961 passed a bill which has become known as the Accelerated Wetlands Acquisition Act (Public Law 87-383, approved Oct. 4, 1961). This Act makes possible the stepped-up purchase of essential wetlands now, while they still exist. In effect, Congress could loan the conservation movement \$105 million which, plus the revenues from duck stamp sales, could be used for this purpose. This money is to be used to promote the conservation of migratory waterfowl and to offset or prevent the serious loss of important wetlands and waterfowl habitat essential to the preservation of such waterfowl. At the end of 7 years, 75% of each year's duck stamp revenues must be used for repayment of the loan. The task of this legislation is obvious—to save at least an essential minimum of the nation's wetlands.

²⁰ Water Quality Improvement Act of 1970, 84 Stat. 91 (1970).

B. STATE LEGISLATION

1. MAINE

Maine Revised Statutes Annotated, Title 12, ch. 421, §§4701–4709 (Additional Supp. 1967)

No person, agency or municipality may remove, fill, dredge or drain sanitary sewage into, or otherwise alter any swamp, marsh, bog, beach, flat or other wetland bordering coastal waters, or fill, dredge or drain sanitary sewage into such waters within such area, without filing written notice to do so, with plans, to the municipal officers and the Wetlands Control Board. A public hearing is held after receipt of such notice. After the hearing, a permit is issued if the Wetlands Control Board approves. Approval may be conditioned upon the applicant amending his plans. Approval may be withheld by the municipality or the Board if either body finds the plans damaging to fish life. An appeal is provided for. Anyone violating any provision of this statute is subject to a maximum fine of \$100. A continuing violation of this statute may be enjoined.

Maine Revised Statutes Annotated, Title 30, ch. 229, §4001 (Additional Supp. 1967).

Wetlands may be “taken” by a municipality with the consent of the owner and payment of compensation.

Maine Revised Statutes Annotated, Title 30, ch. 229, §3001 (Additional supp. 1967).

Any municipality may receive wetlands as devises or gifts.

2. NEW HAMPSHIRE

Wetlands regulation had a modest beginning in New Hampshire in 1955 when the legislature made it illegal to create land by filling in great ponds—lakes or ponds over 10 acres in size—without permission of the Governor and Council.²¹ Before that time, apparently a person could convert the state’s water into his own land by the simple expedient of filling it in.

This statute dealt with public inland waters, not wetlands as such and was the extent of any regulatory effort until 1965. Then, in an act regulating sewage disposal systems on islands, it was provided that no one could fill in a marsh bordering on or adjacent to a great pond of the State for building purposes without approval of the sewage dis-

²¹ New Hampshire Revised Statutes Annotated 482:41–a to 41–d.

positional system in accordance with local zoning ordinances of the municipality, or in absence of same, the Water Supply and Pollution Control Commission.²² The emphasis of this statute, though, was on the prevention of pollution and not the preservation of wetlands.

In 1967, New Hampshire got its first full-fledged wetland regulations—three dredge and fill laws. The first prohibited any person, firm or corporation from excavating or dredging any bank, flat, marsh, swamp or lake bed that lies below the natural mean high water mark of any fresh public waters of the state without petitioning the Water Resources Board.²³ The second replaced the 1955 law regulating placing fill in fresh public waters with a more up-to-date version.²⁴ The third prohibited persons from excavating, removing filling or dredging any bank, flat, marsh or swamp in and adjacent to tidal waters without approval of the New Hampshire Port Authority.²⁵

In 1971, Bill No. 228 was introduced into the New Hampshire House of Representatives and dealt with excavating, filling, mining and construction in the inland waters of the state and established an inland wetlands authority to which anyone seeking to alter any of the existing interior wetlands of the state would have to make petition for a permit to do so.²⁶

3. MASSACHUSETTS

Massachusetts General Laws ch. 131, §40 (1967) entitled: Protection of Flood Plains.

No person shall remove, fill or dredge any bank, flat, marsh, meadow, or swamp bordering on any inland waters without filing notice of his intention to do so, with plans of the proposed activity, with the local authority and with State departments of public works and natural resources. A public hearing is provided for. The local authority may recommend protective measures in the public interest, which are submitted to the Commissioner of Natural Resources. If the area where the work is to be done is essential to proper flood control, the Commissioner may impose conditions necessary to protect the public interest, which must be complied with. A continuing violation of this section may be enjoined.

Massachusetts General Laws ch. 130, §105 (Additional supp. 1966)

Because of the urgent necessity of protecting coastal wetlands, the Commissioner of Natural Resources was given the power to adopt,

²² New Hampshire Revised Statutes Annotated 149:4-c.

²³ New Hampshire Revised Statutes Annotated 488-A (1967).

²⁴ New Hampshire Revised Statutes Annotated 482:41-e to 41-i.

²⁵ New Hampshire Revised Statutes Annotated 483-A, §1-5.

²⁶ New Hampshire Revised Statutes Annotated 483-B, §1-26.

amend, modify or repeal orders regulating, restricting or prohibiting dredging, filling, removing or otherwise altering, or polluting coastal wetlands. Violations of the Commissioner's order is punishable by a fine of between \$10 and \$50 and/or maximum imprisonment of one month.

However, if the Commissioner's order so restricts the use of the property as to deprive the owner of its practical use, a court may decree that the order does not apply to that owner's land. In such a case, the Department of Natural Resources may take the land for the State by eminent domain.

Massachusetts General Laws ch. 40 §8(c) (Additional supp. 1968)

This section empowers a city or town to acquire by gift, purchase, grant, bequest, devise, lease, or otherwise the fee or any lesser interest in wetlands and open spaces. It also empowers a city or town to take land by eminent domain for conservation purposes.

Massachusetts General Laws ch. 132A, §11 (Additional supp. 1968)

The State may reimburse a city or town up to 50% of the cost of acquiring land for conservation purposes pursuant to §8(c) of ch. 40.

Massachusetts General Laws ch. 130, §27A (Additional supp. 1965)

No person shall remove, fill or dredge any bank, flat, marsh, meadow or swamp bordering on coastal waters without filing written notice of his intention to do so with the local licensing authority, the State Department of Public Works, and the Director of Marine Fisheries. Restrictions may be placed on such work and such work must be done subject to these restrictions. Violations of this section are punishable by a maximum fine of \$100, imprisonment for not more than 6 months, or both. A continuing violation of this section may be enjoined.

A case concerning this section held that it does not authorize an absolute prohibition against the filling in of a privately owned marshland if the result would be that the owner would be so deprived of the practical uses of his land so as to amount to a taking of his land without compensation.²⁷

Whether there had been such a deprivation of the practical uses of the marshland as to be equivalent to a taking without compensation depended upon the uses to which the marshland could be put without violating the statutory prohibition against the marsh. Since the evidence at trial on this issue was lacking, the injunctive decree of the

²⁷ *Commissioner of Natural Resources v. S. Volpe & Co.*, 206 N.E. 2d 666 (Mass. 1965).

trial court was reversed and the case was remanded for additional findings on the above issue.

4. RHODE ISLAND

Rhode Island General Laws Annotated §§2-1-13 to 2-1-17 (Additional supp. 1967)

These acts established a public policy of preserving the coastal wetlands of the State. The Department of Natural Resources may, after public hearing, designate coastal wetlands or parts thereof, the ecology of which shall not be disturbed. This designation will be recorded in the registry of deeds in each city or town where the land is located. The right of appeal is allowed for 2 years after recordation. Provision is made for award of damages.

Rhode Island General Laws Annotated §§11-46.1-1 (Additional supp. 1967)

Anyone who dumps or deposits mud, dirt or rubbish upon, or who excavates and disturbs the ecology of intertidal saltmarshes, without first obtaining a permit therefor issued by the Department of Natural Resources shall be fined for each offense \$100: \$50 to the State and \$50 to the complainant. The Director of Natural Resources shall refuse to issue such a permit if in his judgment the dumping or depositing of mud, dirt or rubbish or excavation would disturb the ecology of intertidal saltmarshes.

5. CONNECTICUT

Conn. Gen. Stat. Ann. Title 25, ch. 473, §26-17a. (1967)

The State Board of Fisheries and Game is empowered to do the following:

- (1) Acquire wetlands, or any easements, interests or rights therein, by purchase, exchange, condemnation, gift, devise, lease or otherwise.
- (2) Enter into agreements with owners of wetlands to conserve wetlands.
- (3) Enter into leases with an option to purchase wetlands, provided:
 - a. approval of the Commissioners of Agriculture and Natural Resources is obtained, and
 - b. the lease does not exceed 10 years.

- (4) Take wetlands by eminent domain.
- (5) Secure title to wetlands by paying to a municipality the amount of the municipality's tax liens on such wetlands, where the municipality's property tax on such wetlands is unpaid for 6 years.

Conn. Gen. Stat. Ann. Title 25, ch. 473, §25-10 to §25-17 (1967)

These statutes provide for the dredging of sand and gravel from lands under tidal and coastal waters. This is regulated by the Water Resources Commission, supplemented by a member designated by the Shellfish Commission. Public hearings must be held. Shore erosion, navigation, and living resources must be considered.

Local zoning for marshland protection has been unsuccessfully attempted in Connecticut.²⁸

6. NEW YORK

*Long Island Wetlands Act*²⁹

This Act permits the State to enter into cooperative agreement with towns, villages, or counties for the purpose of preserving and maintaining wetlands on Long Island which have been dedicated for conservation purposes. The State is empowered to provide one-half of the cost of maintaining such areas.

New York Conservation Law, §429a-g (1967)

These sections require the issuance of a permit by the Water Resources Commission before anyone may alter the waters of the State. The Commission may issue the permit subject to conditions upon which the work must be done. The following activities require a permit: altering the channel of a stream, removing materials from a stream, excavating or filling in navigable waters, erecting an impoundment structure, dock or wharf in or across a natural stream or watercourse. A violation of this statute constitutes a misdemeanor, punishable by a maximum fine of \$500, maximum imprisonment of 1 year, or both.

New York Public Lands Law, art. 2, §3.5 (Additional supp. 1967)

The Commissioner of General Services may license and regulate the business of taking sand, gravel or other materials in or upon lands under water and may prescribe the terms and conditions under which

²⁸ *Dooley v. Town Zoning Commission*, 157 Conn. 304, 197 A.2d 770 (1964).

²⁹ New York Conservation Law, §394 (1967).

the same may be taken. After adoption of regulations by the Commissioner, it shall be unlawful to take or remove from lands of the State under water any sand, gravel, or other material, without a license.

New York Public Lands Law, art. 6, §§75-78 (Additional supp. 1967)

Empowers the Commissioner of General Services to grant lands under water to a county, city, town or village for conservation and other purposes.

7. NEW JERSEY

*The Wetlands Act of 1970*³⁰

This Act recognizes the ecological importance of the coastal wetlands, and states that it is necessary to prevent the deterioration and destruction of these lands in order to preserve the ecological balance of the coastal area.

The Act directs the Commissioner of the Department of Environmental Protection to make an inventory and maps of the wetlands. The Act authorizes the Commissioner to make regulations restricting or prohibiting dredging, filling, removing, or otherwise altering or polluting the coastal wetlands. The Act requires the Commissioner to hold a public hearing before adopting any regulations concerning the wetlands.

The Act prohibits any regulated activity from being carried on without a permit from the Department of Environmental Protection. The Commissioner must consider the ecological effect of the work to be performed before issuing a permit. The Act provides that any person having a recorded interest in land affected by the Commissioner's regulations may file a complaint in the Superior Court to determine if the regulations deprive him of the practical use of his land. The Act provides a fine of \$1,000 to be levied against violators of the regulations promulgated by the Commissioner, and also makes violators liable for the cost of restoration of the affected coastal wetland to its condition prior to the violation in so far as is possible.

N.J. STAT. ANN. 12:5-3 to 12:5-8 (1914)

The Board of Commerce and Navigation must pass on all plans for development of waterfront which involves the construction or alteration of a dock, wharf, pier, bulkhead, bridge, pipeline, or any

³⁰ I could find no other citation. In the official legislative copy, all that is said is that it may be cited as the Wetlands Act of 1970.

other similar or dissimilar waterfront development. Public hearings may be held. No provision is made for eminent domain. No reference is made to protection of natural resources.

N.J. STAT. ANN. 13:8A-1 to 13:8A-18 (1961)

This is New Jersey's Green Acres Land Acquisition Act of 1961. The Act provides for purchase of lands for public recreation and conservation of natural resources. A sum of \$60 million was made available by a Green Acres Bond referendum. The acquisition program is under the direction of the Commissioner of Conservation and Economic Development. Of the total amount available, \$20 million was for the purpose of supporting local acquisition. In addition to fee simple acquisitions, acquisition of conservation easements is permitted.

8. DELAWARE

*Delaware Coastal Zone Act*³¹

This Act states that the coastal areas of Delaware are the most critical areas for the future of the State in terms of the quality of life in the State. It, therefore, declared that it is the public policy of the State of Delaware to control the location, extent and type of industrial development in Delaware's coastal area. In so doing, it is thought that the State can better protect the natural environment of its bay and coastal areas and safeguard their use primarily for recreation and tourism. Specifically, this chapter seeks to prohibit entirely the construction of new heavy industry in its coastal areas, which industry is determined to be incompatible with the protection of that natural environment in those areas. While it is the declared public policy of the State to encourage the introduction of new industry into Delaware, the protection of the environment, natural beauty and recreation potential of the State is also of great concern. In order to strike the correct balance between these two policies, careful planning based on a thorough understanding of Delaware's potential and her needs is required. Therefore, control of industrial development other than that of heavy industry in the Coastal Zone of Delaware through a permit system at the State level is called for. It is further determined that offshore bulk product transfer facilities represent a significant danger of pollution of the Coastal Zone and generate pressure for the construction of industrial plants in the Coastal Zone, which construction is declared to be against public policy.

This Act, as seen from the above, is quite a radical departure from the historic and traditional policy of every state to encourage any industry it can to build and operate from that state. Since the Act

³¹ DEL. CODE ch. 70, §7001-7014.

is so new, it cannot as yet be determined what economic effect this Act will have on the State of Delaware; but it appears to be a serious and determined effort to protect the coastal zone.

9. MARYLAND

ANN. CODE of MD. §§718-731 (1967 Replacement Vol.)

This Act declares that in many areas of the State much of the wetlands have been lost or despoiled by unregulated dredging, dumping, filling, etc. and that the remaining wetlands of the State are in jeopardy of being lost. It declares that it is the public policy of the State to preserve the wetlands and to prevent their despoliation and destruction. §719 defines "state wetlands" and "private wetlands". §721 declares that it is unlawful for anyone to dredge or fill in State wetlands without a license to do so by the Board of Public Works. Anyone violating the provisions of this section is deemed guilty of a misdemeanor and may be fined not less than \$500 and not more than \$1,000. Each violation shall be a separate and distinct offense, and in the case of a continuing violation, each day's continuance thereof will be deemed to be a separate and distinct offense. Any land created in violation of this section will be the property of the State.

§723 states that the Secretary of Natural Resources may from time to time promulgate rules and regulations governing dredging, filling, removing or otherwise altering or polluting private wetlands. Provisions are made for a permit to carry out any of the above activities on private wetlands. Appeal may be taken to the Board of Review of the Department of Natural Resources and from there to a circuit court in the county in which the land is located. If the court rules that the restrictions under the Secretary's rules and regulations constitute a taking of land without compensation, the Secretary of Natural Resources may proceed to condemn the land or interests therein and take it by eminent domain.

10. VIRGINIA

Virginia has no specific statutes in the Code relative to coastal wetlands protection. There are some statutes and a constitutional article that do provide some measure of protection to some of the wetlands. Two statutes and the constitutional provision listed below pertaining to ownership of lands are particularly pertinent. The Constitution of Virginia states that:

The natural oyster beds, rocks and shoals, in the waters of this State shall not be leased, rented or sold but shall be held in trust for the benefit of the people of this State, subject to

such regulations and restrictions as the General Assembly may prescribe, but the General Assembly may, from time to time, define and determine such natural beds, rocks or shoals by surveys or otherwise.³²

Some wetlands and shallows are included within the area thus protected.

The Code states that:

All of the beds of the bays, rivers, creeks and the shores of the sea within the jurisdiction of this Commonwealth, and not conveyed by special grant or compact according to law, shall continue and remain the property of the Commonwealth of Virginia, and may be used as a common by all the people of the State for the purpose of fishing and fowling, and of taking and catching oysters and other shellfish . . .³³

The Code further states that:

All unappropriated marsh or meadow lands lying on the Eastern Shore of Virginia, which have remained ungranted, and which have been used as a common by the people of this State, shall continue as such common, and remain ungranted, and no land warrant shall be located upon the same . . .³⁴

However, an accurate designation of those lands used as a common has been lost over the years and only now are state historians trying to relocate these long obscured lands from old deeds and grants. This work could take several years. Title 62.1, §62.1-3, at first glance, seems to offer protection to coastal wetlands. Closer reading, however, shows that to a large extent the Marine Resources Commission does not have discretionary power relative to filling or over construction of private docks and landings for non-commercial use. The Commission does not have any authority over dredging by a riparian owner.

Altogether, Virginia's statutory provisions are highly inadequate for protecting the coastal wetlands.

11. NORTH CAROLINA

The North Carolina Department of Conservation and Development shall pass on all excavations and filling proposals. If any state agency raises an objection to action of the Department, a meeting of a Review Board composed of the Directors of other state agencies may be held. The Review Board may affirm, modify, or overrule the action of the Department of Conservation. Provisions for appeal to the

³² VA. CONST. art. 175.

³³ CODE of VA. tit. 62, §62-1.

³⁴ CODE OF VA. tit. 41, §41-81.

courts are provided. No provision is made for taking of any land by eminent domain.³⁵

A limited acquisition program is in effect funded by part of the State Motor Vehicle Tax Fund.³⁶

12. SOUTH CAROLINA

The State of South Carolina in seeking to protect its coastal wetlands has taken the approach of defining its jurisdiction and ownership of the tidelands, submerged lands and waters located in the coastal region of the State. The State of South Carolina has declared that it has absolute title to Submerged Lands (the area below the mean low water mark) in the navigable waters of the State. The State has *prima facie* title to Tidelands (marshes) (the area between the mean high water mark and the mean low water mark), in and adjacent to the navigable waters of the State. The State holds the Tidelands, Submerged Lands and Navigable Waters in trust for and subject to public purposes and rights of navigation, commerce, fishing, bathing, recreation or enjoyment, and other public and useful purposes, or such other rights as are incident to public waters at common law, free from obstructions and interference by private persons.

On the basis of this general interpretation of the State's definition of tidelands and tideland ownership, there has arisen a legal conflict concerning which lands are actually owned by the State and held in public trust for the people, and which lands are actually owned and/or operated by private individuals. With the exception of isolated cases brought to settle legal disputes to title of specific acreages of marshlands, there has, up to the present, been little or no effort on the part of the State to inventory on behalf of the people of South Carolina the extent of the State's claim to ownership of lands held in trust. The continued lack of an applied formula concerning legal interpretation of ownership of these tidelands has led to an ever increasing number of conflicts between the State and private individuals. In a pilot project in one of South Carolina's counties, an evaluation of ownership claims has pointed out that approximately 90% of tidelands, marshes, and coastal waterways are now claimed by private individuals. These areas so claimed have in many cases undergone extensive improvements relating to water control and management to provide recreational use and development, channel construction, and dredge and fill operations for private real estate development. The South Carolina Water Resources Commission on behalf of the State has collected and evaluated information relating to the tidelands ownership question. This and additional information is available to the State for consideration in resolving the tideland's ownership question.

³⁵ 1969 Adv. Legislative Service No. 7, §113-229 (effective January 1, 1970).

³⁶ N.C. GEN. STAT. ch 105, §446.2 (1967 amended 1969).

§1-357 of the Code of Laws of South Carolina, 1962 embodies the principles expressed above. It states, in part, that the State Budget and Control Board is charged with the complete control, regulation and leasing of all State lands and all public trust properties. For the purpose of leasing oyster and clam rights, it shall use as its agent and advisor the Wildlife Resources Commission and funds derived from the Commission shall be used by the Marine Resources Division of the Wildlife Resources Department for research and management of its marine resources. No person or agency, public or private, will construct or in any manner place upon or within tidelands or submerged lands any pier, wharf, or other structure of any nature or excavate, dig or in any manner create a dock, ditch, canal, or watercourse of any nature within or upon such tidelands and submerged lands or place any material upon or change in any manner the natural conditions of such lands without first obtaining a permit from the Board. Public notice shall be made by the Board of all permits issued.

13. GEORGIA

An attempt to establish a Coastal Wetland Protective Board failed to pass the 1969 Georgia General Assembly. Otherwise only the usual fish and game laws and water pollution laws are germane to wetland protection.

14. FLORIDA

Chapter 67-393 of the General Acts of 1967

This Act amended the Florida Bulkhead Act of 1957 (Florida Statutes, §253.12 et seq.).

§253.12. Vests title in tidal lands in the trustees of the Internal Improvement Trust Fund. The trustees may sell such lands, provided that they determine that the sale would not adversely affect public interests, including the preservation of fish and other natural resources. Notice of the sale must be published in the county newspaper. If objections are filed to the sale, a public hearing must be held. If it appears as a result of the hearing that the public interest would be adversely affected by the sale, then the trustees must withdraw the land from sale. A biological and an ecological survey of the land to be sold must be made in determining whether the sale of the land would adversely affect the public interest.

§253.122. The Board of County Commissioners of each county or governing body of any municipality, after obtaining a biological and an ecological survey, may locate and fix bulkhead lines. Any extension of land outward into the waters of the county is deemed an interference with navigation and the conservation of natural resources.

§253.123 The removal of sand, rock or earth from the navigable waters of the State and the submerged bottoms thereof lying channelward of bulkhead lines is not permitted. Certain exceptions are provided for.

§253.124. Anyone desiring to add to existing land bordering on the navigable waters of the State must apply for a permit to do so. A permit will be issued only if a biological and an ecological survey reveal that the public interest will not be adversely affected. The permit may be revoked for non-compliance with its terms. Anyone who violates this section is guilty of a misdemeanor and upon conviction shall be fined a maximum of \$500, imprisoned for not more than 6 months, or both. The trustees have the authority to require the person to remove the fill.

Zabel v. Pinellas County Water and Nav. Control Authority, 171 So.2d 376 (1965), on remand 179 So.2d 370, dealt with §§253.122 and 253.124. In this case the local authority lost in its attempt to prevent owners of bottom land from filling approximately 11.5 acres of land to be used as a trailer park. The court held that denial of permission to fill the land amounted to a taking of property without just compensation, because it was not established that granting the permit would materially and adversely affect the public interest.

Florida Statutes Annotated ch. 375 (Additional supp. 1966)

This chapter, entitled "Outdoor Recreation and Conservation," empowers the trustees of the Internal Improvement Fund to acquire wetlands and floodlands by purchase, lease-purchase agreements, or otherwise, with funds from the Land Acquisition Trust Fund.

15. ALABAMA

The State of Alabama has taken the position, as has South Carolina and other States, that the state does own absolutely the submerged lands or the area lying below the mean low water mark, which would include the navigable waters. They have also taken the position that the State owns the tidelands, the area between the mean high water mark and the mean low water mark. They are in the process of litigation, as in all other states. The claimants are now going into court and are attempting to prove by grants, in their chain of title, that their private ownership extends to the mean low water mark, because this tidelands area is now valuable.

The State has entered into litigation involving cases where the tidelands have been filled up by natural accretion. Other cases involve the action of the water in the reliction, or the washing away, of formerly high and dry lands, or formerly tidelands, that are now completely submerged. Ordinarily where there is accretion or reliction,

the boundary line of the fast land owner changes with this change in the mean high water line.

ALA. CODE tit. 8, §§ 232-252 (1932)

The Director of Conservation is vested with authority to develop State-owned swamplands. These laws are designed to encourage exploitation.

ALA. CODE tit. 38, §§ 119-122. (1932)

These statutes set forth the right of riparian owners. These authorize and encourage riparian owners to develop lands abutting on tidelands owned by the State by filling and improving these tidelands.

The Department of Conservation is authorized to acquire lands in connection with fish and game programs.

16. MISSISSIPPI

MISS. CODE ANN. §§ 7549.7-01 and 7605-09 (1942)

These sections give Port Commissioners or County Port Authorities, respectively, full jurisdiction and control over lands below mean high tide, including filling and dredging operations. The title to oil and gas remains in the State. These statutes are designed to encourage development of the submerged lands.

At the regular session of the 1972 Mississippi Legislature, a bill was proposed in the House entitled the "Mississippi Coastal Wetlands Protection Act." This Act recognizes that the coastal wetlands are of great ecological importance and states that it is necessary to prevent the deterioration and destruction of these lands in order to preserve the ecological balance in the coastal area. It declared that the remaining coastal wetlands of the State are in jeopardy of being lost or despoiled by unwise and unplanned activities; that such loss or despoliation will adversely affect, if not entirely eliminate, the value of such wetlands as sources of nutrients to finfish, crustacea and shellfish of significant economic value; that such loss or despoliation will destroy the ecological system of such wetlands as habitats for plants and animals of significant economic value and will eliminate or substantially reduce marine commerce, recreation and aesthetic enjoyment; and that such loss or despoliation will, in most cases, disturb the natural ability of tidal wetlands to reduce flood damage and adversely affect the public health and welfare; that such loss or despoliation will substantially reduce the capacity of such wetlands to absorb silt and will thus result in the increased silting of channels and harbor areas to the detriment of free navigation. Therefore, it was declared to be the public policy of the State of Mississippi, taking into account varying

scientific, ecological, economic, developmental, recreational and aesthetic values, to preserve the natural state of coastal wetlands and to prevent the despoliation and destruction of these wetlands.

The Act prohibits any regulated activity from being carried on without a permit. It is the duty of any person proposing to perform any regulated activity to ascertain whether such work affects wetlands.

Any person who violates the provisions of this Act will be civilly liable to the State for the restoration of the affected wetlands to their condition prior to such violation, insofar as restoration is possible. In addition to civil liability under this Act, a violation of this Act is a misdemeanor and will be punished by a fine of not less than \$500 and not more than \$1,000 or by imprisonment of not more than 30 days, or both. The Mississippi State Legislature enacted an amended "Mississippi Coastal Wetlands Protection Act" during its February 1973 session.

17. LOUISIANA

In addition to general water pollution control legislation and legislation for control of fishing, legislation relative to mineral leasing (oil wells) is the only pertinent legislation in Louisiana.

18. TEXAS

REV. CIV. STAT. TEXAS arts. 4051 through 4056a

These statutes give the Texas Parks and Wildlife Commission management control over marl, sand, gravel and shell deposits in the navigable streams, bays, bayous, and the Gulf of Mexico within the jurisdiction of the State. Prior to issuing dredging permits, the Commission must consider possible damage to oysters, oyster beds and fish.

CONCLUSIONS

Several states have statutory provisions relating to wetland, marsh and submerged lands and flood plains. A general categorization of the legal approaches various states have taken based upon the above examination of these statutes indicates the following:

- (1) legislation which enables a state to acquire wetlands or any easement, interest or rights therein by the following means: eminent domain, purchase, exchange, gift, devise, lease, lease with an option to purchase, payment of unpaid tax liens on the land.
- (2) legislation which prohibits certain activities in wetlands areas.

- (a) many statutes provide that a project which involves filling, dredging, obstructing or altering the course of waters in wetlands areas may not commence without obtaining a permit therefor; any conditions placed upon the work in the permit must be complied with. Many of these statutes provide for fines and imprisonment, and violations are subject to injunction or abatement.
 - (b) a few statutes prohibit uses of wetlands inconsistent with conservation by zoning wetlands for conservation purposes.
 - (c) one statute prohibits the use of earth-moving equipment in wetland areas, unless such equipment is registered with the Department of Water Resources.
- (3) the Long Island (New York) Wetlands Act is unique. It provides that the State may enter into cooperative agreements with counties to maintain wetlands and may furnish one-half the cost of maintenance.
- (4) legislation not directly related to wetlands, but affecting flood plains, has been enacted by some states. Such legislation requires that a county zone its flood plains to prevent encroachment and consequent damages.

I would call special attention to legislation of the following States:

1. Connecticut—wetlands acquisition
2. Florida—sale of tidal lands
3. Maine—regulation of dredging and filling
4. Massachusetts—regulation of dredging and filling
5. New Hampshire—regulation of dredging and filling
6. New York—cooperative management agreements
7. Rhode Island—wetlands zoning and regulation of dredging and filling

Recent court decisions in Massachusetts suggest that a legal basis exists for State regulation of marshland use in instances where private ownership and use rights exist which may be in conflict with the public purpose of protection of marine resources. *Commissioner of Natural Resources v. S. Volpe and Co.*, 206 N. E. 2d 666 (Mass. 1965) Regulation, through the police powers of the State, is the most direct legal approach to control of use of wetland, marsh and submerged land. This is short of outright acquisition or control of development rights. Therefore, the significance of the Massachusetts court decision cannot be ignored in analyzing other states' laws and policies which clearly support the doctrine that protection of marine resources is a public purpose.

A LEGISLATIVE PROPOSAL FOR PROTECTION OF THE WETLANDS

An act to provide for the orderly preservation and development of the coastal wetlands; to provide procedures for obtaining permits to alter wetlands; to provide penalties for violation of this act; and for related purposes.

Be it enacted by the legislature of the State of _____:

SECTION 1. This act is to be known as the "Coastal Wetlands Protection Act" and may be so cited.

SECTION 2. It is declared that much of the coastal wetlands of the State of _____ have been lost or despoiled by unregulated dredging, dumping, filling and the like activities, and that the remaining coastal wetlands of this State are in jeopardy of being lost or despoiled by these and other activities; that such loss or despoliation will adversely affect, if not entirely eliminate, the value of such wetlands as sources of nutrients to finfish, crustacea and shellfish of significant economic value; that such loss or despoliation will destroy the ecological system of such wetlands as habitats for plants and animals of significant economic value and will eliminate or substantially reduce marine commerce, recreation and aesthetic enjoyment; and that such loss or despoliation will, in most cases, disturb the natural ability of tidal wetlands to reduce flooding and adversely affect the public health and welfare; that such loss or despoliation will substantially reduce the capacity of such wetlands to absorb silt and will thus result in the increase silting of channels and harbor areas to the detriment of free navigation. Therefore, it is declared to be the policy of this State, taking into account varying scientific, ecological, economic, developmental, recreational and aesthetic values, to preserve the natural state of coastal wetlands and to prevent the despoliation and destruction thereof.

SECTION 3. For purposes of this act:

(a) "Coastal wetlands," "tidal wetlands," or "wetlands" shall mean those areas which border on or lie beneath tidal waters, such as but not limited to banks, bogs, salt marsh, swamps, meadows, flats or other lowlands subject to tidal action, including those areas now or formerly connected to tidal waters, and the surface of which is at or below an elevation of one (1) foot above local extreme high water.

(b) "Regulated activity" means any of the following: draining, dredging, excavation or removal of soil, mud, sand, gravel, aggregate of any kind, or rubbish from any wetland or the dumping, filling or depositing thereon of any soil, stones, sand, gravel, mud, aggregate of any kind, rubbish or similar material either directly or otherwise, and the erection of structures, driving of pilings, or placing of obstruc-

tions, whether or not changing the tidal ebb and flow. Notwithstanding the foregoing, "regulated activity" shall not include the construction or maintenance of aids to navigation which are authorized by governmental authority; the accomplishment of emergency decrees of any duly appointed health officer of a municipality acting to protect the public health; conservation of soil, vegetation, water, fish, shellfish and wildlife performed by duly authorized governmental agencies; or trapping, hunting, fishing and shellfishing where otherwise legally permitted.

(c) "Dredging" means the removal or displacement by any means of soil, sand, gravel, shell or other material; whether of intrinsic value or not, from wetlands.

(d) "Filling" means either the displacement of waters by the deposition into wetlands of soil, sand, gravel, shell or other material; or the artificial alteration of water levels by physical structures, drainage ditches or otherwise.

(e) "Person" means any natural person, partnership, joint stock company, unincorporated association or society, or the State and any agency thereof, or municipal or political subdivisions or other corporation of any character whatsoever.

(f) "Commission" shall mean the Natural Resources and Conservation Commission, the director of said commission or his duly authorized representative.

SECTION 4. No regulated activity shall be conducted upon any wetland without a permit. Any person proposing to conduct or cause to be conducted a regulated activity upon any wetland shall file an application for a permit with the commission, in such form and with such information as the commission may prescribe. Such application shall include a detailed description of the proposed work and a map showing the area of wetland directly affected, with the location of the proposed work thereon, together with the names of the owners of record of adjacent land and known claimants of water rights in or adjacent to the wetland of whom the applicant has notice. The commission shall cause a copy of such application to be mailed to the chief administrative officer in the town or towns where the proposed work, or any part thereof, is located, and to the Director of the State Game and Fish Commission, the county attorney of the county or counties in which any part of such proposed work may occur or which may be affected by such work, the district attorney of any such county or counties, the boards of supervisors of any such county or counties, and the Marine Resources and Fisheries Conservation Commission. No sooner than thirty (30) days and not later than sixty (60) days from the receipt of such application, the commission shall hold a public hearing on such application. The following shall be notified of the hearing by mail not less than fifteen (15) days prior to the date set for the hear-

ing: all of those persons and agencies who are entitled to receive a copy of such application in accordance with the terms hereof and all owners of record of adjacent land and known claimants to water rights in or adjacent to the wetlands of whom the applicant has notice. The commission shall cause notice of such hearing to be published at least once not more than thirty (30) days and not fewer than ten (10) days before the date set for the hearing in the newspaper having a general circulation in each county where the proposed work, or any part thereof, is located. All applications and maps and documents relating thereto shall be open for public inspection at the office of the commission. At such hearing any person or persons may appear and be heard.

It shall be the duty of any person proposing to perform any regulated activity, including the performance of any contract with any state agency for dredging, sale or removal of shells, gravel, sand or other such materials, to ascertain whether such work affects wetlands.

SECTION 5. In granting, denying or limiting any permit the commission shall consider the effect of the proposed work with reference to the public health and welfare, marine fisheries, shell-fisheries, wildlife, the protection of life and property from flood, hurricane and other natural disasters, and the public policy set forth in Section 1 of this Act. The commission shall require a bond in an amount and with surety and satisfactory conditions securing to the state compliance with the conditions and limitations set forth in the permit. The commission may suspend or revoke a permit if the commission finds that the applicant has not complied with any of the conditions or limitations set forth in the permit or has exceeded the scope of the work as set forth in the application. The commission may suspend a permit if the applicant fails to comply with the terms and conditions set forth in the application. The commission shall state, upon his record, his findings and reasons for all actions taken pursuant to this section. The commission shall cause notice of any order in issuance, denial, revocation or suspension of a permit to be published in a daily newspaper having a circulation in the county or counties wherein the wetland lies.

SECTION 6. (a) An appeal may be taken by the applicant or any person or corporation, municipal corporation or interested community group other than the applicant who has been aggrieved by such order from the denial, suspension or revocation of a permit or the issuance of a permit or conditional permit within thirty (30) days after publication of such issuance, denial, suspension or revocation of any such permit to the court of any county having jurisdiction over the property which may be affected by any such proposed work authorized by such permit.

If the court finds that the action appealed from is an unreasonable exercise of the police power, it may set aside the order. If the

court so finds that the action appealed from constitutes the equivalent of a taking without compensation, and the land so regulated otherwise meets the interests and objectives of Section 1 of this Act, it may, at the election of the commission, (1) set aside the order or (2) proceed to award damages as provided by Section 9 of this Act.

(b) Such appeal shall be brought by a complaint in writing, stating fully the reasons therefor, with a proper citation, signed by a competent authority, and shall be served at least twelve (12) days before the return date upon the commission and upon all parties having an interest adverse to the appellant. Such appeals shall be brought to the next return day of the court after the filing of such appeal. The commission shall forthwith, after service of notice of any appeal, prepare and file in said court a copy of such portions of the record of the case from which such appeal has been taken as may appear to the commission to be pertinent to such appeal, with such additions as may be claimed by any party of interest to be essential thereto, certified by the commission. The court, upon such appeal in making its determinations as provided in subsection (a) of this section, shall review, upon the record so certified, the proceedings of the commission and examine the question of the legality of the action of the commission and the propriety of said action. If, upon hearing such appeal, it appears to the court that any testimony has been improperly excluded by the commission or that the facts disclosed by the record are insufficient for the equitable disposition of the appeal, it shall refer the case back to the commission to take such evidence as it may direct and report the same to the court, with the commission's finding of fact and conclusions of law. Such appeal shall have precedence in the order of trial.

SECTION 7. In determining the propriety of issuing permits for any regulated activity under this Act, the commission and courts are to interpret broadly the provisions of this Act in favor of the preservation of wetlands as opposed to any alteration of the character of such wetlands, and to favor the best public interest as opposed to private or corporate pecuniary interest.

SECTION 8. The Attorney General, district attorney or county attorney having jurisdiction may institute civil and/or criminal actions or proceedings against any person believed to be in violation of this Act. Such action shall be brought in the court of any county in which the alleged violation occurs or in which property affected by such alleged violation is located in the manner of other proceedings.

SECTION 9. Any person who violates the provisions of this Act shall be civilly liable to the State for the restoration of the affected wetland to its condition prior to such violation, insofar as restoration is possible. The appropriate court shall specify a reasonable time for the completion of restoration.

In addition to civil liability under this Act, a violation of this Act

is a misdemeanor and shall be punished by a fine of not less than Five Hundred Dollars (\$500.00) and not more than One Thousand Dollars (\$1,000.00) or by imprisonment of not more than thirty (30) days, or both.

In the case of continuing violations, each day shall constitute a separate charge; however, separate violations under this Act need not be severed for trial when an identity of parties and location exists.

SECTION 10. If any clause, sentence, paragraph or part of this Act shall for any reason be adjudged by any court of competent jurisdiction to be invalid, such judgment shall not affect, impair or invalidate the remainder of this Act, but shall be confined in its operation to the clause, sentence, paragraph or part thereof directly involved in the controversy in which judgment shall have been rendered.

SECTION 11. This Act shall take effect and be in force from and after its passage.

Gulf Research Reports

Volume 4 | Issue 2

January 1973

The Seasonal Occurrence and Abundance of Chaetognatha in Mississippi Sound

Mohammed Saeed Mulkana
Gulf Coast Research Laboratory

Thomas D. McIlwain
Gulf Coast Research Laboratory

DOI: 10.18785/grr.0402.10

Follow this and additional works at: <http://aquila.usm.edu/gcr>

Recommended Citation

Mulkana, M. S. and T. D. McIlwain. 1973. The Seasonal Occurrence and Abundance of Chaetognatha in Mississippi Sound. *Gulf Research Reports* 4 (2): 264-271.
Retrieved from <http://aquila.usm.edu/gcr/vol4/iss2/10>

This Article is brought to you for free and open access by The Aquila Digital Community. It has been accepted for inclusion in Gulf and Caribbean Research by an authorized administrator of The Aquila Digital Community. For more information, please contact Joshua.Cromwell@usm.edu.